

ABSTRACT

A first optical interface is coupled to a first IP service node and a first non-IP service node. A second optical interface is coupled to a second IP service node and a second non-IP service node. The first optical interface is coupled to the second optical interface
5 by a first working link for the IP service nodes and by a second working link for the non-IP service nodes. The first optical interface is coupled to the second optical interface by a shared protect link. The first optical interface and the second optical interface replace either of the first working link or the second working link with the shared protect link.